Stent Restenosis with Anomalous Origin of the Coronary Artery

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Picture.

A 71-year-old man with anomalous origin of the left circumflex coronary artery (LCX) was admitted to our hospital because of angina pectoris and a sirolimus-eluting stent (SES) was implanted in the LCX. Six months later, he suffered from recurrence of chest discomfort. Sixty-four slice multidetector computed tomography (MDCT) demonstrated

that LCX originated from the right coronary sinus and ran between the ascending aorta and left atrium (LA). In-stent restenosis and stent fracture were suspected on MDCT image. Coronary angiography revealed restenosis. Intravascular ultrasound demonstrated partial stent-strut discontinuity suggestive of stent fracture at the stenotic lesion site. SES frac-

ture was reported as a cause of in-stent restenosis (1). In this case, the stented lesion was fixed by aorta and LA, but the distal part of the LCX moved freely during the cardiac cycle. The stent lesion had a hinge point and was exposed to mechanical stress, and eventually stent fracture occurred. MDCT provided the anatomical information and insight into the mechanism of restenosis. In terms of risk assessment and the prediction for stent fracture, it is necessary to conduct careful assessment by MDCT before coronary intervention in patients with anomalous origin of the coronary ar-

tery, except in cases of an emergency.

The authors state that they have no Conflict of Interest (COI).

Reference

1. Aoki J, Nakazawa G, Tanabe K, et al. Incidence and clinical impact of coronary stent fracture after sirolimus-eluting stent implantation. *Catheter Cardiovasc Interv* **69**: 380-386, 2007.